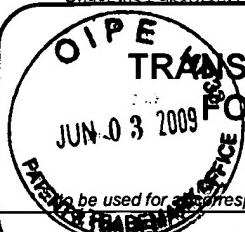


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

 <p><b>TRANSMITTAL FORM</b></p> <p><i>(This form is to be used for all correspondence after initial filing)</i></p>		Application Number	10/575,278
		Filing Date	10/08/2004
		First Named Inventor	James E. Van Buskirk
		Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
		Total Number of Pages in This Submission	281450-00212

<b>ENCLOSURES (Check all that apply)</b>		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please Identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input checked="" type="checkbox"/> CD, Number of CD(s) <u>2</u>	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Katten Muchin Rosenman, LLP		
Signature	/Michael S. Tomsa/		
Printed name	Michael S. Tomsa		
Date	June 1, 2009	Reg. No.	64,264

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature	/Michael S. Tomsa/		
Typed or printed name	Michael S. Tomsa	Date	June 1, 2009

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Hfu  
PATENT -- Attorney Docket No. 281450-00212

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	James Edwin Van Buskirk	)	<p><b>CERTIFICATE OF MAILING</b>  I hereby certify that this paper is being deposited with the United States Postal Office, with sufficient postage, via first class mail to Mail Stop MISSING PARTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.</p>
Application No.:	10/575,278	)	
Filing Date:	October 8, 2004	)	
Title:	Method, Apparatus and System for Synthesizing an Audio Performance Using Convolution at Multiple Sample Rates	)	
Group Art Unit:	3627	)	
Examiner:	Not yet assigned.	)	
Customer No.:	27160	)	
Confirmation No.:	3697	)	

Response to Notification of Defective Response

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Defective Response dated May 1, 2009 enclosed are:

1.  A copy of the Notice to Notification of Defective Response. (*Required*)
2.  Response to Notice to Notification of Defective Response
3.  2 Compact Disks
4.  Transmittal Letter for Compact Disk Submission
5.  Directory of Said Compact Disk entitled "Giga Pulse"
6.  The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire

pendency, or credit any overpayment, to Deposit Account No. 50-1214. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-1214.

To avoid a potential future rejection, all text files from the previously submitted disks have been combined into a single text file in accordance with CFR 1.52(e). The data submitted herewith is identical to that originally filed.

*June 1, 2009*

/Michael S. Tomsa/  
Michael S. Tomsa  
Registration No. 64,264

**KATTEN MUCHIN ROSENMAN LLP**  
2900 K Street NW / Suite 200  
Washington, D.C. 20007  
Telephone: (312) 902-5200  
Facsimile: (312) 902-1061



PATENT -- Attorney Docket No. 281450-00212

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): James Edwin Van Buskirk

Serial No.: 10/575,278

Filing Date: October 8, 2004

Title: Method, Apparatus and System for Synthesizing an Audio Performance  
Using Convolution at Multiple Sample Rates

Group Art Unit: Not yet assigned.

Examiner: Not yet assigned.

**TRANSMITTAL LETTER FOR COMPACT DISC SUBMISSION**

Enclosed are two compact discs having identical copies of one computer program listing. The compact discs are in Read-Only format and are in full compliance with the American Standard Code for Information Interchange (ASCII). The multiple files from the disks submitted on August 1, 2008 have been combined into a single TXT file. No new matter has been added, nor has any matter been removed. The machine format for the compact discs is IBM-PC and the operating system compatibility is Windows. A sheet showing the file contained on the compact discs, including file name, size in bytes, and date of creation is attached hereto.

By: /Michael S. Tomsa/  
Michael S. Tomsa  
Reg. No. 64,264

**KATTEN MUCHIN ROSENMAN LLP**  
2900 K Street NW / Suite 200  
Washington, D.C. 20007  
Telephone: (312) 902-5200  
Facsimile: (312) 902-1061



PATENT -- Attorney Docket No. 281450-00212

**UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): James Edwin Van Buskirk

Serial No.: 10/575,278

Filing Date: October 8, 2004

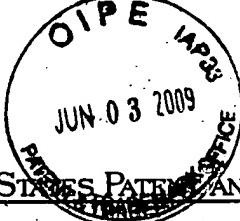
Title: Method, Apparatus and System for Synthesizing an Audio Performance  
Using Convolution at Multiple Sample Rates

Group Art Unit: Not yet assigned.

Examiner: Not yet assigned.

**DISK DIRECTORY**

<b>File Name</b>	<b>File Size</b>	<b>File Date</b>
d:\GigaPulse.txt	::: 74.4 MB (78,099,785 bytes)	::: June 01, 2009



UNITED STATES PATENT AND TRADEMARK OFFICE

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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/575,278	James E. Van Buskirk	28145000212
Patent Administrator Katten Machin Roseman 525 West Monroe Street Chicago, IL 60661		
<b>RECEIVED</b> MAY 03 2009 HOB		
INTERNATIONAL APPLICATION NO. PCT/US04/33290		I.A. FILING DATE      PRIORITY DATE 10/08/2004      10/09/2003

CONFIRMATION NO. 3697  
371 FORMALITIES LETTER



OC00000003695023

Date Mailed: 05/01/2009

### NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- Priority Document
- Copy of the International Application filed on 04/10/2006
- Copy of the International Search Report filed on 04/10/2006
- Copy of IPE Report filed on 03/05/2007
- Preliminary Amendments filed on 04/10/2006
- Information Disclosure Statements filed on 08/10/2006
- Biochemical Sequence Diskette filed on 07/01/2008
- Oath or Declaration filed on 03/05/2007
- Biochemical Sequence Listing filed on 04/10/2006
- U.S. Basic National Fees filed on 04/10/2006
- Assignment filed on 02/27/2007
- Priority Documents filed on 04/10/2006
- Power of Attorney filed on 03/05/2007

Applicant's response filed 07/01/2008 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 11/20/2006 have not been completed.

- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d). Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF. Refer to attachment or PAIR document dated Error Report 7/1/08 (Multiple files on CD).

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

**For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:**

- **For Rules Interpretation, call (571) 272-0951**
- **For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.

<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

PATRICIA A BOOKER

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Telephone: (703) 756-1409